

Title (en)

Adaptive apparatus for compensating for distortion in an incoming signal comprising quadrature-related carrier signals.

Title (de)

Adaptive Vorrichtung zur Kompensierung der Verzerrungen eines Eingangssignals mit Quadraturträgern.

Title (fr)

Appareil adaptatif pour compenser les distorsions d'un signal d'entrée comprenant des signaux avec porteuses en quadrature.

Publication

EP 0244136 A2 19871104 (EN)

Application

EP 87303453 A 19870421

Priority

US 85639786 A 19860428

Abstract (en)

A technique is disclosed for equalizing an incoming signal including quadrature-related carrier signals by forming the product of the incoming signal at at least one prescribed time and only one real-valued coefficient associated with each time. In one embodiment of the present invention, the equalized incoming signal (43) is demodulated (44) into a first pair of component signals (I, Q). At least one of these component signals is then used to generate each coefficient. In another embodiment of the present invention, each coefficient is generated in response to at least one of the component signals in the first pair along with a second pair of component signals (I',Q') which are formed by demodulating (54) the incoming signal. This technique can be advantageously adapted to incorporate a number of coefficient updating algorithms and is suitable for use in a number of modulation formats.

IPC 1-7

H04L 27/00

IPC 8 full level

H03H 15/00 (2006.01); **H04B 3/06** (2006.01); **H04L 27/01** (2006.01)

CPC (source: EP US)

H04L 27/01 (2013.01 - EP US)

Cited by

EP0800289A3

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0244136 A2 19871104; EP 0244136 A3 19890503; EP 0244136 B1 19930714; CA 1256955 A 19890704; DE 3786483 D1 19930819;
DE 3786483 T2 19931118; JP S62260434 A 19871112; US 4759037 A 19880719

DOCDB simple family (application)

EP 87303453 A 19870421; CA 531631 A 19870310; DE 3786483 T 19870421; JP 10342587 A 19870428; US 85639786 A 19860428